



An Energy Efficiency Workshop & Exposition

Kansas City, Missouri

Electric Utility Restructuring in Missouri

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Missouri's Electricity Profile

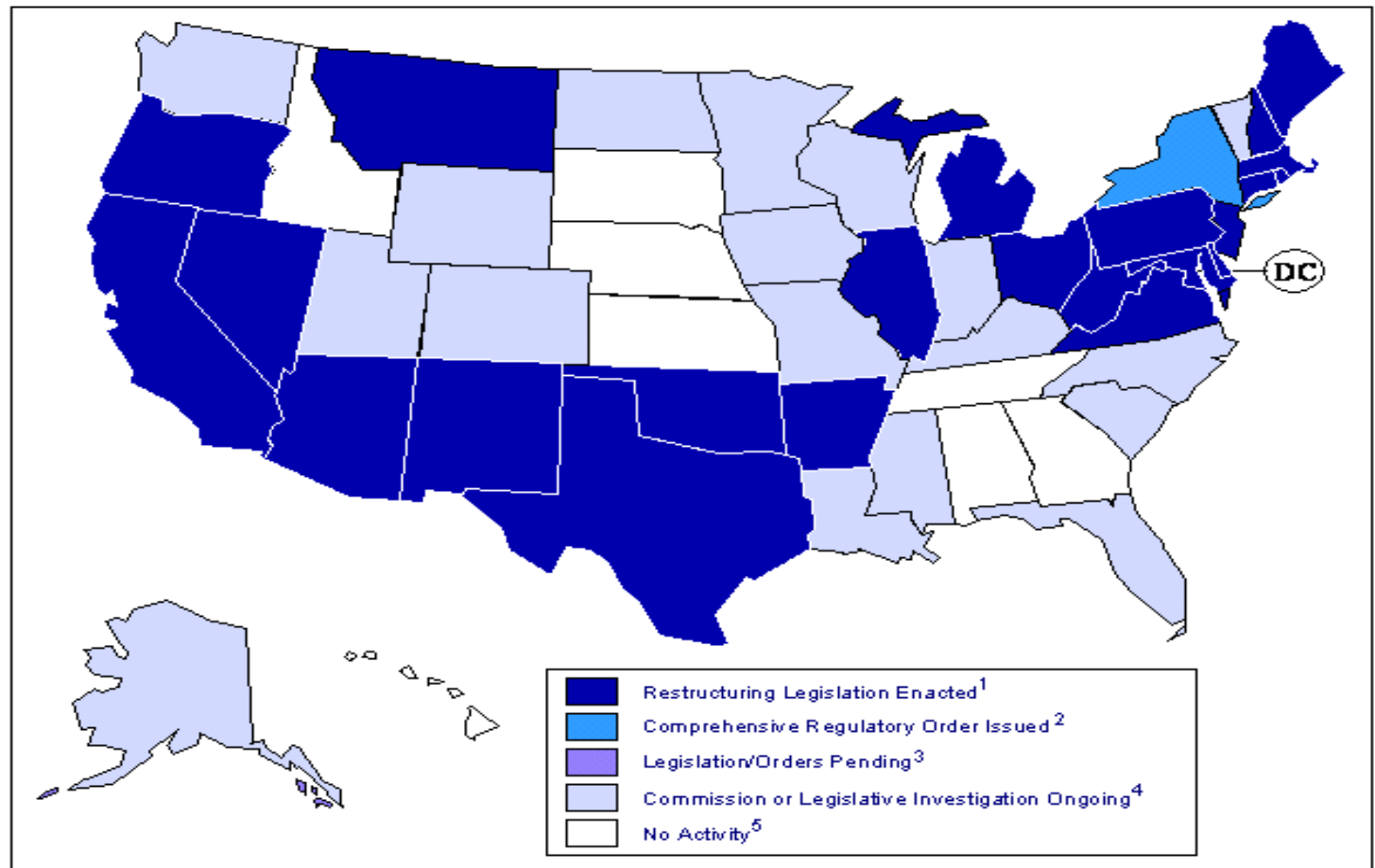
- Resources used to generate electricity in 1999: (Source: US DOE, EIA)
 - Coal 83%
 - Natural Gas 2%
 - Nuclear 12%
 - Hydroelectric 2%
 - Wood, Waste and Petroleum 1%
- Investor-owned utilities (IOUs) provide approximately 70% of Missouri's electricity. Municipals provide 12%, and cooperatives provide 16%.
- Residential customers consume 40% of Missouri's electricity; commercial users 35% and industrial 23%.



What Consumers Want from Restructuring

- Residential consumers want:
 - Low electricity rates
 - Reliable electric system
 - Clean fuels that contribute to clean air and water
- Big consumers want choice to negotiate price with their provider
 - Source: Texas Deliberative Polling

State Restructuring status-April 2001



1-5 Source:
Energy
Information
Administration



Current Legislation in Missouri

- In 2001 session there were eight bills to allow partial or full retail competition and a bill to change existing laws to facilitate competition without authorizing it.
- Primary issues discussed:
 - Transfer or sale of generating assets to an affiliate company
 - Utility worker protections
 - Utility taxation
 - Choice of supplier for large industrial and commercial users
 - Impact on retail rates
 - Net metering and interconnection standards
 - Market power issues
 - Stranded cost recovery
 - Provider of last resort and default provider
 - Lessons from California experience



Outcome of 2001 Missouri Legislation



- A bill to allow choice for large users and the sale of generation assets was the primary utility restructuring bill considered (GENCO bill).
- It did not pass in 2001.



GENCO Bill - Major Provisions

- IOUs can transfer existing generation assets to affiliate and operate as GENCO
- Transfers regulation of GENCO from Missouri Public Service Commission to FERC
- Industrial and commercial customers using more than 1 MW (in service territories of less than 1 million customers) and 2 MW (in all other areas) can choose their energy provider.
- Net metering and standard interconnection procedures required up to 1% of a company's peak demand for renewable energy systems up to 100 kilowatts.



GENCO Bill - Pros & Cons

- **Pros**

- Large customer choice of provider and potential for lower energy costs creating economic development incentive for new businesses to locate in Missouri
- Net metering for small renewable energy generation

- **Cons**

- Potential for rate increases for remaining customers if Missouri's lower-cost generation assets are no longer reserved for Missouri citizens and PSC regulatory authority is transferred to FERC

- Expanded energy procurement options with retail competition
 - Long-term fixed price contracts
 - Discounts for interruptible customers
 - Discounts for 'peak-shaving' customers
 - Time of day pricing can mean savings for customers with peak demand in off-peak hours



Opportunities for Building Managers

- Access to Energy Management Services
 - ‘Turnkey’ improvements in energy efficiency through Energy Service Companies
 - Expanded utility ‘Technical Assistance’ services to help retain large retail customers



Opportunities for Building Managers

- More energy choices are available to you
- Need to know your energy usage profile to negotiate the best prices and services
- Energy efficiency reduces your cost and vulnerability to volatile market prices
- Consider distributed generation from clean fuel sources (microturbines, fuel cells, solar, wind, combined heat and power)



Customer Protections

- Disclosure of customer information about bills, terms of service, energy resources and emissions
- Safeguards against market power
- Aggregation
- Fair and affordable rates
- Public benefit programs for efficiency, low-income and renewable energy

- Benefits to the public from a regulated electricity system are likely to be lost in a competitive system (e.g. utility investments in energy efficiency and renewable energy).
- Many states are retaining and expanding these benefits by creating a public benefits fund.
- Funds are provided through a small charge on customers' bills.



Investments in Energy Efficiency

- In 1998, electricity savings in Missouri from utility investments in Demand Side Management (DSM) were 0.08% of total electricity sales --1/20th the national average of 1.71%. (U.S. DOE/EIA)
- Missouri DSM savings have trended upward since 1992 due to “low-hanging fruit” from lack of earlier investments.
- DSM savings include both energy efficiency and load management programs.



Public Benefits Programs

- Energy efficiency
- Low-income weatherization and bill payment assistance
- Renewable energy
- These items are good energy policy and should be supported with or without utility restructuring.



Energy-Efficiency Benefits

- Energy-efficiency is an energy resource.
 - Moderates demand and reduces the number of new power plants and transmission line upgrades
 - Reduces pollutants
 - Saves money for consumers and businesses -- even more important with higher energy bills
 - Energy efficiency investments at 2-3 cents/kWh are more cost effective than building new generation at 4-5 cents/kWh (Midwest long-term market price)



Potential Savings from Energy Efficiency

- Missouri ranks 5th in potential energy savings, primarily due to no statewide energy efficiency standard (Alliance to Save Energy, 1998)
- Potential savings per home average over 20 million Btu. Total energy savings are projected to be 567 billion Btu - from building shell improvements alone. (Alliance to Save Energy)
- Cost-effective energy measures in an “average” Missouri residence can reduce annual utility bills by as much as 470/



Renewable Energy Benefits

- No ongoing fuel costs (solar and wind) compared to soaring prices of primary generating fuels
- Diversifying energy sources improves reliability
- Domestic alternatives keep dollars at home
- Reduced pollution
- Opportunities for new industries and employment
- On-site generation does not contribute to transmission and distribution lines



Renewable Energy Potential

- o 12 states in the Midwest have wind energy potential to generate 4 times the electricity consumed by the U.S. in 1990. (USDOE)
- o Two Missouri utilities, Utilicorp United (KC area) and City Utilities (Springfield) are investing in wind generation.
- o Missouri has average daily summer solar radiation comparable to the

Barriers to Renewable Energy

- Methods used by utilities to calculate value of fuel sources in the future
- No net metering that allows customers who generate their own electricity to offset the power they buy with the power they generate
- No simple interconnection standards to allow power to be fed back to the grid



Barriers to Renewable Energy

- Lack of incentives or requirements to use renewable energy sources
- Utility opposition to distributed generation
- Inertia



Support for Public Benefits Programs

- In a regional poll (by USDOE, Chicago) of residential customers:
 - More than 80% believe more renewable resources should be used to generate electricity (especially solar, wind and hydro technologies).
 - About 70% were willing to pay \$5 or more extra per month for renewable energy.
 - More than 70% said state governments should keep utility rates low for low-income households.



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Thank you

For more information, contact:

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